

Claims

Sub A3

1. An immunoregulator obtainable from urine capable of regulating Th1 and/or Th2 cell activity.
2. An immunoregulator obtainable from urine capable of modulating dendritic cell differentiation.
3. An immunoregulator according to claim 1 capable of modulating dendritic cell differentiation.
4. An immunoregulator according to claim 3 wherein said urine is obtained from a pregnant mammal, preferably wherein said mammal is human.
5. An immunoregulator comprising an active component obtainable from a mammalian chorionic gonadotropin preparation said active component capable of stimulating splenocytes obtained from a non-obese diabetes (NOD) mouse, or comprising an active component functionally related to said active compound.
6. An immunoregulator comprising an active component obtainable from a mammalian chorionic gonadotropin preparation said active component capable of protecting a mouse against a lipopolysaccharide induced septic shock.
7. An immunoregulator according to claim 5 or 6 wherein said active component is present in a fraction which elutes with an apparent molecular weight of 58 to 15 kilodalton as determined in gel-permeation chromatography.
8. An immunoregulator according to claim 5 or 6 wherein said active component is present in a fraction which elutes with an apparent molecular weight of 15 to 1 kilodalton as determined in gel-permeation chromatography.
9. An immunoregulator according to claim 5 or 6 wherein said active component is present in a fraction which elutes with an apparent molecular weight of < 1

Sub A3

kilodalton as determined in gel-permeation chromatography.

10. An immunoregulator according to claim 7, 8 or 9 wherein said mammalian chorionic gonadotropin preparation is derived from urine.
11. An immunoregulator according to anyone of claims 5 to 10 capable of regulating Th1 and/or Th2 cell activity.
12. An immunoregulator according to anyone of claims 5 to 11 capable of modulating dendritic cell differentiation.
13. An immunoregulator according to anyone of claims 5 to 12 wherein said stimulated splenocytes are capable of delaying the onset of diabetes in a NOD-severe-combined-immunodeficient mouse reconstituted with said splenocytes.
14. An immunoregulator according to anyone of claims 5 to 13 wherein said active component is capable of inhibiting gamma-interferon production of splenocytes obtained from a non-obese diabetes (NOD) mouse.
15. An immunoregulator according to anyone of claims 5 to 14 wherein said active component is capable of stimulating interleukine-4 production of splenocytes obtained from a non-obese diabetes (NOD) mouse.
16. An immunoregulator according to anyone of claims 5 to 15 wherein said active component is capable of reducing ASAT plasma levels after or during organ failure.
17. Use of an immunoregulator according to anyone of claims 1-16 for the production of a pharmaceutical composition for the treatment of an immune-mediated-disorder.
18. Use according to claim 17 wherein said immune-mediated disorder comprises chronic inflammation, such as diabetes, multiple sclerosis or chronic transplant rejection.
19. Use according to claim 17 wherein said immune-mediated disorder comprises acute inflammation, such as

Sub A3

septic or anaphylactic shock or acute or hyper acute
transplant rejection.

20. Use according to claim 17 wherein said immune-mediated disorder comprises auto-immune disease, such as systemic lupus erythematosus or rheumatoid arthritis.

21. Use according to claim 17 wherein said immune-mediated disorder comprises allergy, such as asthma or parasitic disease.

22. Use according to claim 17 wherein said immune-mediated disorder comprises an overly strong immune response directed against an infectious agent, such as a virus or bacterium.

23. Use according to claim 17 to 22 wherein said treatment comprises regulating relative ratios and/or cytokine activity of lymphocyte subset-populations in a treated individual.

24. Use according to claim 23 wherein said subset populations comprise Th1 or Th2 cells.

25. Use according to anyone of claims 17 to 24 wherein
20 said immunoregulator comprises a hCG preparation or a
fraction derived thereof.

26. A pharmaceutical composition for treating an immune-mediated disorder comprising an active component obtainable from urine capable of stimulating splenocytes obtained from a non-obese diabetes (NOD) mouse, said stimulated splenocytes delaying the onset of diabetes in a NOD-severe-combined-immunodeficient mouse reconstituted with said splenocytes, or comprising an active component functionally related to said active component.

30 27. A pharmaceutical composition for treating an immune-
mediated disorder according to claim 26 wherein said
active component is capable of inhibiting gamma-
interferon production or stimulating interleukine-4
production of splenocytes obtained from non-obese
35 diabetes (NOD) mouse.

UNITED STATES OF AMERICA

Sub A5

38. A method according to claim 36 or 37 wherein said therapeutic effect is further measured by determining relative ratios and /or cytokine activity of lymphocyte subset-populations in said animal.
39. A method according to claim 38 wherein said therapeutic effect is further measured by determining enzyme levels in said animal.
40. An immunoregulator selected by a method according to anyone of claims 36 to 39.
41. A pharmaceutical composition comprising an immunoregulator according to claim 40.
42. Use of an immunoregulator according to claim 40 for the preparation of a pharmaceutical composition for the treatment of an immune-mediated disorder.

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